

3) Brief COPE Scale (higher scores = better coping); 4) Acculturative Stress (ASSIS) (higher scores = higher stress) [For international students only] and; 5) demographic information. **RESULTS:** The mean age of the 19 participants was 28.9 years \pm 4.6. A majority of the respondents were Asian (47.4%), female (73.7%), enrolled in the PhD program (73.7%), single (52.6%), international students (57.9%) and lived with family (47.4%). Mean PCS and MCS were 49.97 \pm 9.3 and 49.97 \pm 8.22, respectively, indicating that both the physical health and mental health summary scores were comparable to the general population. Overall, participants reported low stress (GSI-R) levels (mean= 56.53 \pm 20.3; range 21 – 147) and engaged in mid-range levels of coping mechanisms to deal with stress (mean= 71.42 \pm 7.1; range 28 – 140). Among international students, acculturative stress levels (mean= 51.10 \pm 27.9; range 36 – 180) were low. **CONCLUSIONS:** There is a paucity of quantitative data for perceived stress among graduate students. The results from this pilot study will be used to implement a future survey among a larger and more diverse sample of graduate students.

PIH74

A SIMPLE AND EFFECTIVE APPROACH FOR ANALYZING MULTIVARIATE LONGITUDINAL HEALTH OUTCOMES IN OBSERVATIONAL STUDIES

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OBJECTIVES: The purpose of this paper is to propose a simple and efficient approach for analyzing multivariate longitudinal data (MLD), such as longitudinal health-related quality of life (HRQoL) assessments in observational studies. This will be accomplished using the combination of two popular statistical methods for causal inference and multivariate data, namely the inverse probability-weighted (IPW) estimator and principal component analysis (PCA). **METHODS:** Multivariate outcomes at each time point will be converted to the first principal component score (FPCS) for each subject. Then all FPCS will be composited into a numerical observation using the area under a curve (AUC). The IPW estimator is used to compare the difference between the two treatments in terms of the estimated AUCs. Finally, the proposed method will be applied to a simulated dataset to determine if there is significant difference between two treatments. **RESULTS:** The statistical results show that the 95% bootstrap percentile confidence interval (BPCI) is (-3.06, -3.59). Since the BPCI does not contain zero, we claim that the treated group (M=1) is significantly different from the control group (M=0) at a 5% level in overall longitudinal multivariate health outcomes. **CONCLUSIONS:** In this paper, we propose a simple and efficient approach to overcome the difficulty of analyzing MLD in practice. We demonstrate how to use our proposed method with a simulated dataset. Our simulated data set allowed us to demonstrate how our proposed method may be particularly useful for analyzing longitudinal HRQoL assessments in medical studies.

PIH75

ASSESSMENT OF MEDICAL AND PHARMACY STUDENTS' KNOWLEDGE AND PERCEPTIONS ABOUT GENERIC MEDICINES AND THEIR QUALITY AND PRICES IN KABUL - AFGHANISTAN

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OBJECTIVES: To assess medical and pharmacy students' knowledge and perception about generic medicines and its quality and prices in Kabul- Afghanistan. **METHODS:** A questionnaire based convenience sample of 255 was applied and study was conducted at Kabul Medical University and Pharmacy Faculty of Kabul University. The questionnaire had 19 questions and was designed in two sections (definition of generic and branded medicine and perception towards generic medicine). A total of 95 pharmacy and 125 medical students had voluntarily participated in the survey. SPSS version 16 was used for data analysis purposes. **RESULTS:** Among the total target n = 220 (response rate 86.27%) students voluntarily participated in the survey and n = 27 (28.42%) of the pharmacy students were working as pharmacists in the private pharmacy outlets. In reference to the knowledge about generic medicines n = 173 (67.84%) of the respondents had knowledge about generic medicines. The interviewees n = 205 (80.39%) expressed that the quality is their major concern, when buying generic medicines. Both groups have shown unanimity n= 216 (84.70%) that prescription of generic medicines promotes cost containment among the patient. **CONCLUSIONS:** The current study emphasizes that awareness and knowledge about generic medicines by including special topics in the medical and pharmacy curriculum is important and further promoting culture of prescribing generic medicines in daily practice.

INDIVIDUAL'S HEALTH - Health Care Use & Policy Studies

PIH76

MOMS2B: IMPROVING BIRTH OUTCOMES THROUGH USE OF CELL PHONES, TEXTING, AND INTENSIVE CASE MANAGEMENT

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OBJECTIVES: Out of 200 of the most populous U.S. counties, Philadelphia has the fifth highest infant mortality rate. Keystone First partnered with Verizon Wireless to launch Moms2B—a program providing free cell phones and minutes to directly engage Keystone First's high-risk pregnant Medicaid members. The goals are to improve prenatal care and health outcomes, and keep members connected to the plan's Bright Start[®] maternity program. **METHODS:** The Bright Start Care Management team contacted participants on the cell phones to provide coaching and care coordination during pregnancy and postpartum. Participants also received text messages with nutritional and clinical information specific to gestational age. In addition, they received encouragement and gift incentives to maintain scheduled prenatal/postpartum care, along with information about screenings, and educational and community-based programs. Seventeen participants actively engaged in Moms2B (intervention group: IG) were risk-matched to 17 nonparticipating high-risk pregnant members (control group: CG). Matching variables included

age group (<18, 18–34, 35+), race, ethnicity, number of high-risk diagnosis codes, and zip codes. High-risk diagnoses—including prior history of preterm delivery, insulin-dependent diabetes, hypertension, multiple gestations, and incompetent cervix—are known predictors of low birth weight and premature delivery. **RESULTS:** Thirty-one participants at high-risk for premature delivery received cell phones and text-messaging services. Twenty-six mothers (84%) successfully delivered babies to term (<31 days from expected delivery date). Babies born in the IG had higher birth weights than those born in the CG (mean, 38.71g), lower rates of low birth weight babies (-0.12%) and very low birth weight babies (-0.06%), and delivered almost a full week later (mean, 0.96 wk). Participants reported high program-satisfaction rates. **CONCLUSIONS:** Members at high risk for preterm delivery participating in Moms2B had superior pregnancy outcomes compared to nonparticipants; program satisfaction was favorable.

PIH77

VALUE OF INFORMATION ANALYSIS TO DETERMINE PRIORITIES OF FUTURE RESEARCH FOR LNG-IUS 13.5 MG CONTRACEPTIVE

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OBJECTIVES: To apply value of information analysis (Vol) to a cost-effectiveness model of a Levonorgestrel intrauterine system LNG-IUS 13.5mg (total content) in order to identify parameters worth investigating to reduce remaining uncertainty around the reimbursement decision. LNG-IUS 13.5mg is a novel low-dose hormonal intrauterine contraceptive system for up to 3 years use and was shown to be cost-effective over this horizon vs. commonly used short-acting contraceptive methods in women aged 20-29. **METHODS:** Vol analyses were performed using an existing US cost-effectiveness model with LNG-IUS 13.5mg. Expected Value of Perfect Information (EVPI) and the parameter EVPIs (EVPII) for the following groups were estimated: probability of failure (unintended pregnancy (UP)); probability of discontinuation during year 1 and subsequent years; and follow-up consultation costs. Individual EVPIs were calculated for probability of failure of injectable contraceptives and LNG-IUS 13.5mg and first year discontinuation probability of LNG-IUS 13.5mg. EVPII were calculated using different willingness to pay (WTP) values for an UP and extrapolated to population values. **RESULTS:** The estimated EVPI was \$69, \$62 and \$40 at WTP of \$300, \$400 and \$700 per UP, respectively. EVPII analysis suggested that probabilities of failure and first year discontinuation were the most influential, accounting for the majority of uncertainty of the reimbursement decision. Population EVPI estimates suggested that further research in this area was potentially worthwhile. **CONCLUSIONS:** Comparative effectiveness research focusing on the failure rate of injectable contraceptives and the first year discontinuation rate of LNG-IUS 13.5mg is potentially worthwhile. Expected value of sample information will have to be compared to the actual costs of such research.

PIH79

NEONATAL INFORMATION ON APPROVED DRUG LABELS: AN ANALYSIS OF CONSISTENCY IN DRUG LABELING

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OBJECTIVES: The paucity of pediatric information available on drug labels has led to calls for regulatory intervention aimed at providing clinicians with improved information to treat pediatric populations, especially neonates. This study examined how neonatal drug data is presented on labels for approved drugs over the past 30 years. **METHODS:** This study included review of publicly available data retrieved from the FDA website Drugs@FDA. Three sections of the FDA approved label were analyzed for mention of neonates; "Indication and Usage", "Dosage and Administration" and "Pediatric Use". "Neonates" were defined as infants age 0-28 days and/or specifically cited as "neonates" or "newborns". This analysis did not include label information pertinent to *in utero* exposure to drug. Descriptive statistics were performed and the pharmaceutical active ingredient was the unit of analysis. **RESULTS:** The study included all NDA/BLA approvals by the FDA between January 1, 1980 and December 31, 2012 and available on the Drugs@FDA website (n=676). Eleven (1.6%) labels included neonate information in the Indications and Usage section, 33 (4.9%) in the Dosage and Administration section and 62 (9.2%) in the Pediatric Use section. References to neonates occurred in two sections on 2 labels (0.3%) and in all three sections on 5 labels (0.7%). Statements that the drug was not studied and/or not recommended in neonates were most often found in the Pediatric Use section (528, 78%), but also noted in the Dosage and Administration section (22, 3.3%) and the Indications and Usage section (9, 1.3%). **CONCLUSIONS:** This study demonstrates that data necessary to determine the appropriateness of medications in neonates is difficult to find, even when available to clinicians. As regulators consider how to improve the quantity and quality of neonatal drug data, consideration should be given to standardizing neonatal information on drug labels, thereby ensuring that regulatory efforts to incentivize pediatric research are optimized.

PIH80

HEALTH CARE UTILIZATION AND COSTS AMONG PRIVATELY INSURED CHILDREN WITH OROFACIAL CLEFTS

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OBJECTIVES: Orofacial clefts (OFC) are among the most common birth defects and often require hospitalizations during early childhood. We assessed health care utilization and costs for children during 2010. **METHODS:** Data were extracted from the 2006-2010 MarketScan[®] Commercial claims databases to identify children with ≥ 2 outpatient claims or ≥ 1 inpatient claim for OFC during those five years to maximize case ascertainment. Health care utilization and costs during 2010